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06/04/2004

TESTA, HURWITZ & THIBEAULT, LLP HIGH STREET TOWER 125 HIGH STREET **BOSTON, MA 02110**

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(Depositor's name)	James E. Fajkowski
(Signature)	
(Date)	

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,661	01/04/2002	Chiping Chen	MIT-132 (5473/145)	6530

TITLE OF INVENTION: VACUUM ELECTRON DEVICE WITH A PHOTONIC BANDGAP STRUCTURE AND METHOD OF USE THEREOF

L	APPLN. TYPE	SMALL ENTITY	ISSUE FI	EE	PUBLICATION FEE	TOTAL	FEE(S) DUE	DATE D	UE
	nonprovisional	NO	\$1330)	\$300	S	1630	09/07/2	004
	EXA	MINER	ART UN	IT	CLASS-SUBCLASS				
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1. C	Change of correspondence (1.363).	ce address or indication of "F	ee Address" (37	names of	nting on the patent front page, up to 3 registered patent at	torneys or	_{1_} Testa,	Hurwitz	&
(☐ Change of correspond Address form PTO/SB/I	lence address (or Change of (122) attached.	Correspondence	firm (hav	R, alternatively, (2) the name of ing as a member a registered a	attorney or	2		Thibeault
(] ;	□ "Fee Address" indicat PTO/SB/47; Rev 03-02 Number is required.	tion (or "Fee Address" Indica or more recent) attached. Us	tion form e of a Customer		d the names of up to 2 register or agents. If no name is listed inted.		3		

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

(A) WAND OF ASSIGN		(b) RESIDENCE. (CITT and STATE OR COUNTRY)
Massachusetts	Institute of Technology	Cambridge, Massachusetts

Please check the appropriate assignee category or categories (will not be printed on the patent); 4a. The following fee(s) are enclosed:

☐ individual ☐ corporation or other private group entity

government

Issue Fee

2 Publication Fee

4b. Payment of Fee(s):

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(Authorized Signature) Jan

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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08/13/2004 AADOFO2 00000017 10037661

01 FC:1501 02 FC:1504 1330.00 OP

300.00 DP

Express Mail Mailing Label No. EV399913622US Application Serial Number 10/037,661 Filing Date January 4, 2002 First Named Inventor Chen Group Art Unit 2817 Nguyen, Patricia T. **Examiner Name FORM** MIT-132 Attorney Docket No. Not applicable Patent No. Issue Date Not applicable ENCLOSURES (check all that apply) Fee Transmittal Form Copy of Notice to File Missing Notice of Appeal to Board Parts of Application of Patent Appeals and Interferences Check Attached Appeal Brief (in triplicate) Copy of Fee Formal Drawing(s) Transmittal Form Amendment/Response Request For Continued Status Inquiry Examination (RCE) Transmittal ☐ Preliminary \boxtimes Return Receipt Postcard ☐ After Final Affidavits/declaration(s) Power of Attorney (Revocation of Prior Powers) Certificate of First Class Mailing Letter to Official Draftsperson under 37 C.F.R. 1.8 including Drawings Terminal Disclaimer Certificate of Facsimile [Total Sheets ____] Transmission under 37 C.F.R. 1.8 **Executed Declaration and Power** \boxtimes Additional Enclosure(s) Petition for Extension of of Attorney for Utility or Design (please identify below) Time Patent Application Issue Fee Transmittal Form (1 pg.) Information Disclosure Small Entity Statement Statement Form PTO-1449 Copies of IDS CD(s) for large table or computer program Citations Certified Copy of Priority П Amendment After Allowance Document(s) Request for Certificate of Sequence Listing submission Correction Paper Copy/CD Certificate of Correction (in Computer Readable Copy duplicate) Statement verifying identity of above SIGNATURE BLOCK **CORRESPONDENCE ADDRESS** Respectfully submitted Direct all correspondence to: Patent Administrator Testa, Hurwitz & Thibeault, LLP High Street Tower Date: August 12, 2004 125 High Street Reg. No. 54,089 James E. Fajkowski Boston, MA 02110 Tel. No.: (617) 310-8414 Attorney for Applicants Tel. No.: (617) 248-7000

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Testa, Hurwitz & Thibeault, LLP

High Street Tower 125 High Street Boston, MA 02110



FY 2004

Express Mail Ma	ailing Label No. EV399913622US
	Complete if Known
Application Serial Number	10/037,661
Filing Date	January 4, 2002
First Named Inventor	Chen
Group Art Unit	2817
Examiner Name	Patricia T. Nguyen
Attorney Docket No.	MIT-132

1.
Entity 2. The Commissioner is hereby authorized to credit or charge any fee indicated below for this submission to Deposit Account No. 20-0531. Required Fees (copy of this sheet enclosed). Additional fee required under 37 CFR 1.16 and 1.17. Overpayment Credit. Applicant claims small entity status. FEE CALCULATION 1. FILING FEE Large Entity Fee Fee Fee Fee Paid Entity Fee Fee Fee Pee Fee Description Fee Paid (\$) Surcharge - late filing fee or oath Surcharge - late provisional filing fee or cover sheet 2,520 2,520 2,520 Request for ex parte reexamination Extension for reply within first month Large Entity Fee (\$) Fee Paid Fee Paid The Commissioner is hereby authorized to credit Fee Paid Fee Fee Fee Fee Fee Description Fee Paid The Description Fee Paid Fee Paid Fee Paid Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Description Fee Paid F
The Commissioner is hereby authorized to credit or charge any fee indicated below for this submission to Deposit Account No. 20-0531. ☐ Required Fees (copy of this sheet enclosed). ☐ Additional fee required under 37 CFR 1.16 and 1.17. ☐ Overpayment Credit. ☐ Applicant claims small entity status. ☐ Applicant claims small entity status. ☐ FEE CALCULATION 1. FILING FEE Large Entity Fee Paid Fee Fee Fee Description Fee Paid Fee Paid Fee Paid Fee Paid Fee Paid Fee Paid Fee Fee Fee Description Fee Paid Fee Description Fee Description Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Paid Fee Description Fee Paid Fee Paid Fee Paid Fee Description Fee Paid
or charge any fee indicated below for this submission to Deposit Account No. 20-0531. Required Fees (copy of this sheet enclosed). Additional fee required under 37 CFR 1.16 and 1.17. Overpayment Credit. Applicant claims small entity status. FEE CALCULATION In FILING FEE Large Entity Fee (\$) Fee Description Surcharge - late filing fee or oath 2.30 Surcharge - late provisional filing fee or cover sheet 2.50 Surcharge - late provisional filing fee or cover sheet 2.50 Surcharge - late provisional filing fee or cover sheet 2.50 Surcharge - late provisional filing fee or cover sheet 2.50 Surcharge - late filing fee or oath 50 Surch
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770 Utility filing fee 330 165 Notice of Appeal
340 Design filing fee 330 165 Filing a brief in support of an appeal
160 Provisional filing fee 290 145 Request for oral hearing 130 130 Petitions to the Commissioner
130 130 Petitions to the Commissioner 180 180 Submission of Information Disclosure
Number Number Rate Amount Statement
Filed Extra 770 385 Filing a submission after final
rejection (37 CFR 1.129(a))
Total Claims - 20 = x \$ 18.00 = 770 385 For each additional invention to be
examined (37 CFR 1.129(b))
Independent 100 100 Certificate of Correction for
Claims - 3 = x \$ 86.00 = applicant's error
110 55 Submission of Terminal Disclaimer
Multiple Dependent Claim(s), if any \$290.00 = Other fee (Specify) Issue Fee 1630.00
Other fee (Specify) TOTAL:
SMALL ENTITY DISCOUNT:
SUBTOTAL (1) (\$) 0
2. AMENDMENT CLAIM FEES
Claims Highest No. Present Rate Fee Paid SUBTOTAL (3) (\$) 1630.00
Remaining Previously Extra
After Amend. Paid For
Total - = x \$ 18.00 = SUBTOTAL (1) 0
Indep = $x \$ 86.00 =$ SUBTOTAL (2)
First Presentation of Multiple Dep. + \$290.00 = SUBTOTAL (3) 1630.00
Claim
TOTAL: (\$)
SMALL ENTITY DISCOUNT: (\$)
SUBTOTAL (2) (\$)0 TOTAL (\$) 1630.00
CORRESPONDENCE ADDRESS SIGNATURE BLOCK
Direct all correspondence to: Respectfully submitted,
Patent Administrator
Testa, Hurwitz & Thibeault, LLP
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